

**REMARKS**

Applicants note that the application originally contained claims 1-10 and these claims were amended under the PCT articles to claims 1-8. Claims 1-8 were then amended under 37 CFR §1.121 to now pending claims 1-18. (First Preliminary Amendment under 37 CFR §1.121, filed March 22, 2006 with the application)

Applicants believe that the Examiner may have missed this First Preliminary Amendment upon review of the application documents. A copy of this First Preliminary Amendment is attached for the Examiner's convenience.

In view of the above Remarks, applicants believe the pending application is now in condition for examination on the merits.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 03-2775, under Order No. 12810-00229-US1 from which the undersigned is authorized to draw.

Dated: November 27, 2007

Respectfully submitted,  
Electronic signature: /Donald K. Drummond,  
Ph.D./  
Donald K. Drummond, Ph.D.  
Registration No.: 52,834  
CONNOLLY BOVE LODGE & HUTZ LLP  
1875 Eye Street, NW  
Suite 1100  
Washington, DC 20006  
(202) 331-7111  
(202) 293-6229 (Fax)  
Attorney for Applicant

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

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In re Patent Application of:  
Johannes Buettner et al.

Application No.: TBA  
(National Phase of PCT/EP2004/010497)

Confirmation No.: N/A

Filed: Concurrently Herewith

Art Unit: N/A

For: METHOD FOR EXTRACTING  
NITROCRESOLS FROM WASTE WATER  
PRODUCED IN THE MANUFACTURE OF  
MONONITROTOLUENE AND USE OF SAID  
EXTRACT

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Examiner: Not Yet Assigned

**FIRST PRELIMINARY AMENDMENT**

MS Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

**INTRODUCTORY COMMENTS**

Prior to examination on the merits, please amend the U.S. patent application as follows:

**Amendments to the Specification** begin on page 2.

**Amendments to the Claims** are reflected in the listing of claims which begins on page 3

**Remarks** begin on page 6.

**Amendments to the Specification**

On page 1, immediately following the title, please add the following new section:

**--CROSS REFERENCE TO RELATED APPLICATION**

The present application is a National Stage application of PCT/EP2004/010497, filed September 18, 2004, which claims priority from German Patent Application No. DE 103 45 601.5, filed September 29, 2003. --

### AMENDMENTS TO THE CLAIMS

This listing of the claims will replace all prior versions and listings of the claims in this application.

#### Listing of the Claims:

1. (Currently amended) A process for preparing dinitrotoluene by nitration of toluene, which comprises ~~using as~~ providing a feedstock; ~~of~~ nitroresol-containing extracts obtained by removing nitroresols from wastewater of mononitrotoluene preparation, adding one or more acids to the alkaline wastewater of mononitrotoluene preparation ~~being acidified with acids to~~ obtain a pH of at most 3 and treating the nitroresols ~~being treated~~ with an extractant.

2. (Currently amended) The process according to claim 1, wherein the one or more acids having have a  $pK_a$  value of at most 2 ~~are used~~.

3. (Currently amended) The process according to claim 1 ~~or 2~~, wherein the one or more acids are mineral acids ~~are used~~.

4. (Currently amended) The process according to ~~any of claims 1 to 3~~ claim 1, wherein the nitroresols are extracted with toluene, o-, m-, p-nitrotoluene or mixtures thereof.

5. (Currently amended) The process according to ~~any of claims 1 to 4~~ claim 1, wherein the volume ratio of the wastewater to be extracted to the extractant is from 1:1 to 50:1.

6. (Currently amended) The process according to ~~any of claims 1 to 5~~ claim 1, wherein the nitroresol-containing extracts are added as a substream to the process stage of mononitration of toluene.

7. (Currently amended) The process according to ~~any of claims 1 to 5~~ claim 1, wherein the nitroresol-containing extracts are added as a substream to the process stage of dinitration.

8. (Currently amended) The process according to ~~any of claims 1 to 7~~ claim 1, wherein the amount of nitroresols added by the addition of the extracts is between 0.01 and 1% by weight based on the amount of dinitrotoluene obtained.

9. (New) The process according to claim 2, wherein the acids are mineral acids.

10. (New) The process according to claim 4, wherein the volume ratio of the wastewater to be extracted to the extractant is from 1:1 to 50:1.

11. (New) The process according to claim 11, wherein the nitroresol-containing extracts are added as a substream to the process stage of dinitration.

12. (New) The process according to claim 2, wherein the acids are selected from nitric acid, sulfuric acid or a mixture thereof.

13. (New) The process according to claim 1, wherein adding the one or more acids includes obtaining a pH of at most 2.

14. (New) The process according to claim 5, wherein the volume ratio is from 2:1 to 10:1.

15. (New) The process according to claim 6, wherein the extractant is toluene.

16. (New) The process according to claim 7, wherein the extractant is 0-, m-, p-nitrotoluene.

17. (New) A process for preparing dinitrotoluene comprising:  
providing a feedstock of nitroresol-containing extracts obtained from a wastewater stream of a mononitrotoluene process, wherein nitrotoluene is used as an extractant; and  
adding the feedstock to the dinitrotoluene process such that the amount of nitroresols added by the addition of the extracts is between 0.01 and 1% by weight based on the amount of dinitrotoluene obtained.

18. (New) The process according to claim 17, wherein the volume ratio of the wastewater to the dinitrotoluene extractant is from 2:1 to 10:1.

**REMARKS**

Consideration of claims 1-18 is respectfully requested. The claim amendments were made in-part for purpose of clarification and format, and to remove multiple claim dependency. No new matter has been added. The claim amendments do not limit the original English translated claims. In view of the above amendments, applicants believe the pending application is in condition for allowance.

If a fee is due with this Amendment, please charge our Deposit Account No. 03-2775, under Order No. 12810-00229-US1 from which the undersigned is authorized to draw.

Dated:

3-22-06

Respectfully submitted,

By 

Joseph Barrera

Registration No.: 44,522

CONNOLLY BOVE LODGE & HUTZ LLP

1007 North Orange Street

P.O. Box 2207

Wilmington, Delaware 19899

(302) 658-9141

(302) 658-5614 (Fax)

Attorney for Applicant